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IN THE CLAIMS:

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65. (Currently Amended) A vehicle occupant seat detection means and weight responsive classification system for ~~advanced~~ a supplemental restraint system ~~for~~ of a vehicle; comprising:

a weight-sensing unit operatively secured beneath at least ~~one~~ a seat in said vehicle;

a computerized system communicatively connecting said weight sensing unit to a supplemental restraint system ~~installed in said vehicle~~, said supplemental restraint system comprising at least one airbag system each having at least one airbag, each said airbag system corresponding to one of said ~~seats~~ at least one seat;

said at least one weight-sensing unit ~~being~~ configured for taking weight measurements of at least an occupant in ~~a~~ said at least one seat, and comprising means for converting said weight measurements into one or more electrical signals, and communicating said electrical signals to said computerized system;

said computerized system ~~being~~ programmably configured to calculate an operating weight value from said electrical signals corresponding to said weight measurements for each ~~said seat~~ seated occupant and to communicate said operating weight value to said airbag system corresponding to said ~~seat~~ at least one seated occupant;

each said airbag system being electronically configured for receiving said operating weight value for said seat and for ~~mechanically~~ adjusting a deployment unit within said airbag system to deploy said at least one airbag with a deployment force and acceleration for airbag inflation that are proportionate to said weight measurements;

said computer system comprises at least an erasable programmable read only memory "EPROM" operatively configured with said computerized system for monitoring the weight of at least a seated ~~occupants~~ occupant and for correcting the weight of at least a changing occupant; and

said weight sensing unit disposed between a seat mounting structure means and the floor means of a vehicle responsive for determining the actual weight of a seated occupant, wherein said airbag system is rendered of sufficient deployment force and acceleration for said airbag inflation to keep said seated occupant on the seat when a collision is sensed, but is not rendered of sufficient deployment force and acceleration for said airbag inflation to cause impact injury to the occupant.

66. (Original) The vehicle occupant seat detection means and weight responsive classification system of claim 65, wherein said weight sensing unit comprising at least a load cell.

67. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim 66, wherein said load cell configured with at least a strain gauge comprising electrical resistance means ~~for transforming~~ responsive for generating electrical energy corresponding to said occupant's weight ~~into electrical energy~~.

68. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system ~~for a weight responsive apparatus~~ of claim 65, wherein said ~~computer means further comprises at least an~~ EPROM further comprises means for controlling weight data about a changing occupant at an address line configured for each seat and responsive for effectively controlling the classification data for at least a vehicle occupant.

69. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system ~~for a weight responsive apparatus~~ of claim ~~67~~ 68, wherein said EPROM further comprises means for correcting said seat occupant's weight data at the address line when said data is influenced by at least an external force comprising of at least a bump and/or at least a transient pike.

70. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system ~~for a weight responsive apparatus~~ of claim 68, wherein said address line configured for each seat comprising at least one occupant detection means , wherein said occupant detection means comprising means for sensing weight and generating a weight signal corresponding to the weight of at least a seated occupant.

71. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system ~~for a weight responsive apparatus~~ of claim ~~69~~ 67, wherein said ~~sensing unit comprises at least a~~ load cell ~~comprising at least a strain gage configured with at least an electrical resistance means and~~ operatively configured with at least a restraint device, the restraint device communicatively connected to said computer system comprising means for adjusting the deployment force/speed of said restraint device for at least an assigned seat.

72. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim ~~66~~ 70, wherein said address line ~~configured for each seat,~~ further configured with means for comparing identified weight data with the seated occupant's weight data, said means generating at least a new data if said comparison is significantly different ~~correcting seat occupant data when said data is influenced by at least an external force~~.(.)

73. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim 66, wherein said load cell comprises at least one strain gauge each configured to sense a force applied to it ~~when said occupant occupies said seat~~, each said gauge comprising electrical resistance elements configured to detect and measure resistance occurring when external strain is ~~applied to said gauge~~ sensed, wherein said external strain ~~corresponds to said~~ corresponding to at least an applied force from said ~~occupant~~ occupant's body on said seat, and ~~is~~ wherein said external strain being converted into corresponding electrical ~~current for communicating said electrical signals~~ energy for communications.

74. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim 65, wherein said computerized system comprises a control module comprising ~~electrically connected to~~ a central processing unit, said control module ~~programmably configured to identify~~ comprising means for identifying each ~~said~~ seat for which said weight measurements are taken and ~~to activate~~ activating said airbag system corresponding to each said seat for which said weight measurement exceed a minimum weight threshold value generally corresponding to the weight of at least a small child.

75. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim 74, wherein said minimum threshold value is ~~about~~ at least 20 pound.

76. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim 74, wherein said control module ~~is~~ further configured to receive analog ~~electric line~~ signals ~~from said weight sensing unit regarding said weight measurements, said control module further being configured to convert~~ and converting said analog signals to digital signals corresponding to said ~~analog signals~~ occupant's weight.

77. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim 76, wherein said control module ~~is~~ further configured to convert said digital signals to binary signals corresponding to ~~said analog~~ signals ~~and suitable~~ for use with ~~a~~ plurality of transistorized switches ~~that comprise~~ comprising said central processing unit for ~~processing said weight measurements as said binary signals and~~ communicating said operating weight value ~~calculated therefrom~~.

78. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim 74, wherein said central processing unit comprises read only memory ~~having~~ configured with a basic input-output system comprising at least a storage means ~~for storing said weight measurements communicated from said control module~~, wherein said processing unit further comprising random access memory, and wherein said read only memory ~~storing~~ operatively configured with a software program ~~that utilizes~~ responsive for said random access memory, said ~~software program being programmed to use said~~ random access memory responsive for accessing said weight measurements ~~from at least an~~ and in communication with said address line ~~in said basic input output system and for calculating said operating weight value~~.

79. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim 65, wherein said deployment unit comprises a combustion chamber operatively connected to a canister of igniting gas, a microprocessor configured ~~to receive~~ for receiving said operating weight value ~~communicated from said computerized system~~, said microprocessor electrically connected to an accelerometer, said accelerometer electrically connected to said canister and operatively connected to said combustion chamber.

80. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim 79, wherein said accelerometer ~~is electrically~~ communicatively connected to said canister, wherein said ~~by a~~ canister configured with at least a microprocessor

electrically connected to a gas release valve relay and an igniter, and wherein said gas release valve relay ~~being~~ communicatively connected to a release valve operatively connected to said canister ~~between said canister and~~ for releasing proportionate amount of gas into said combustion chamber.

81. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim ~~74~~ 80, wherein said accelerometer comprises at least one piezoelectric crystal operatively connected to a mass in contact with a spring, said spring operatively connected to a sliding pot secured to said combustion chamber, said sliding pot configured to adjust an opening in said combustion chamber for expansion of igniting gas ~~from said canister~~ into said at least one airbag.

82. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim ~~81~~ 79, wherein said microprocessor ~~is~~ further configured to translate said operating weight value ~~received from said computerized system~~ into an electric ~~current~~ energy operatively proportionate to said weight measurements, said electrical energy responsive for energizing ~~and to energize~~ said at least one crystal ~~with said proportional current~~, said energized crystal ~~configured with said mass~~ responsive for translating said electrical energy ~~of said proportional current to~~ into mechanical energy responsive for displacing said mass and correspondingly compressing said spring ~~for adjustment of~~ and enabling said sliding pot adjustment ~~a degree~~ correspondingly proportional to said weight measurements.

83. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim 80, wherein said accelerometer ~~is~~ further configured to ~~deliver~~ transmit a first signal corresponding to said operating weight value to said canister microprocessor, said canister microprocessor configured to process said first signal and deliver to said gas release valve relay a second signal corresponding to a specific volume of gas to be released ~~from said canister through said release valve~~ into said combustion chamber, said specific volume of gas comprising the amount of said gas required to generate said deployment force and acceleration for airbag inflation ~~that are~~ correspondingly proportionate to said weight measurements.

84. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim 83, wherein said accelerometer comprises at least one piezoelectric crystal, each operatively connected to a mass in contact with a spring, said spring operatively connected to a sliding pot secured to said combustion chamber, said sliding pot operatively configured to adjust an opening in said combustion chamber(,) for expansion of igniting gas ~~from said canister~~ into said at least one airbag, said specific volume of gas and said opening defined by said sliding pot are calibrated

~~together~~ such that ~~said opening and said volume generate~~ said deployment force and acceleration are enabled when said volume of gas is ignited ~~by~~ , whereby said igniter ignites said gas when a collision sensor ~~operatively connected to said vehicle~~ senses a collision has occurred of a severity requiring airbag deployment.

85. (Original) The vehicle occupant seat detection means and weight responsive classification system of claim 65 further comprising a collision sensor operatively connected to said computerized system.

86. (Original) The vehicle occupant seat detection means and weight responsive classification system of claim 65 further comprising a collision sensor operatively connected to said deployment unit.

87. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim 85 ~~or claim 86~~, wherein said collision sensor ~~is configured to signal for~~ communicatively configured to initiate deployment of airbags in response to ~~a threshold~~ said collision severity threshold.

88. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim ~~85 or 86~~ 87, wherein said ~~collision sensor is configured to signal for deployment of airbags in response to a threshold collision severity, said threshold~~ collision severity threshold comprising at least a collision substantially equivalent to said vehicle traveling between about 10 m.p.h. and 15 m.p.h. and hitting a substantially rigid ~~wall~~ object.

89. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim 65, wherein said computerized system ~~is~~ configured to ~~temporarily~~ store said weight measurements and to erase said weight measurements for said at least one ~~said~~ seat when said occupant leaves said seat ~~to store newly taken~~ and wherein a at least a new weight ~~measurements~~ measurement is enabled when said occupant or a new occupant occupies said seat.

90. Cancelled.

91. Cancelled.

92. Cancelled.

93. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim 65, wherein said weight sensing unit comprises a weight measuring capacity of ~~about 1,000 pounds~~ at least 1 pound.

94. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim 65 further comprising a signal amplifier, said amplifier configured to amplify at least one of analog, digital, and binary ~~electronic~~ signals ~~transmitted~~ within ~~said advanced~~ at

least a supplemental restraint system.

95. (Currently Amended) The vehicle occupant seat detection means and weight responsive classification system of claim 65 further comprising a transient voltage suppressor ~~electronically~~ communicatively connected to the computerized system, said suppressor configured to filter ~~or diminish~~ transient spikes ~~that have potential for damage within the computerized system or to cause~~ wherein preventing abnormal readings or communications within the computerized system is enabled.

96. Cancelled.

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101. Cancelled.

102. (NEW) The vehicle occupant seat detection means and weight responsive classification system of claim 65, wherein said weight sensing unit includes means for regenerating at least a vehicle seat occupant signal when the seat identification data from at least an address line does not match the seat identification data of at least the seated occupant.

103. (NEW) The vehicle occupant seat detection means and weight responsive classification system of claim 65, wherein said means for regenerating at least an occupant signal includes means for determining if the is at least an identified seat with data at the address line, whereby if there is an identified seat data, comparing said identified data with the current seated occupant is enabled, and wherein if such comparisons are significantly different, regenerating at least a new data based on the current information on the seated occupant is further enabled.

104. (NEW) The vehicle occupant seat detection means and weight responsive classification system of claim 65, wherein said weight sensing unit further comprising sensors disposed between the floor means and the seat mounting structure means of the vehicle responsive for measuring at least the occupant's actual weight and enabling signal communication therefrom.

105. (NEW) The vehicle occupant seat detection means and weight responsive classification system of claim 65, wherein said weight sensing unit operatively configured with said computerized system and communicatively connected to said airbag system responsive for controlling the resistance of said supplemental restraint device, such that in an accident, an occupant of a vehicle impacts the device without injury.

106. (NEW) The vehicle occupant seat detection means and weight responsive classification system of claim 65, wherein said computerized system further comprising means for calculating a restraint value of said supplemental restraint device based upon at least the weight value of the occupant and/or at least a collision force value according to the vehicle speed.

107. (NEW) The vehicle occupant seat detection means and weight responsive classification system of claim 65, wherein said supplemental restraint device further comprising means for controlling the airbag tension, wherein the airbag is rendered of sufficient tension to keep the occupant on the seat when a collision is sensed, but is not rendered of sufficient tension to cause impact injury to the occupant.

108. (NEW) The vehicle occupant seat detection means and weight responsive classification system of claim 65, wherein said weight sensing unit further comprising means for housing at least an electrical resistance means responsive for converting said occupant's body weight into electrical energy.

109. (NEW) The vehicle occupant seat detection means and weight responsive classification system of claim 65. wherein said means for housing said electrical resistance means comprising at least a load cell.

110. (NEW) The vehicle occupant seat detection means and weight responsive classification system of claim 65, wherein said load cell further comprises at least a silicon substrate.